

CURRENT STATUS OF UNANI SYSTEM
OF MEDICINE IN AFGHANSTAN

By

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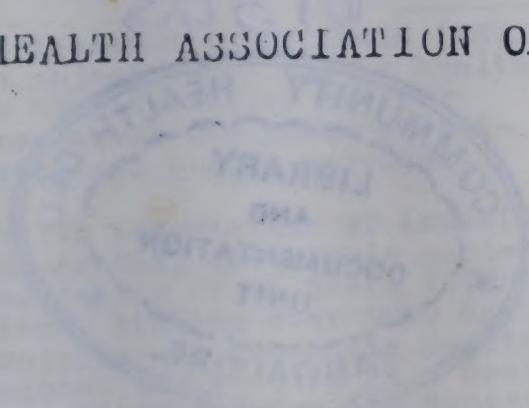
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VOLUNTARY HEALTH ASSOCIATION OF INDIA

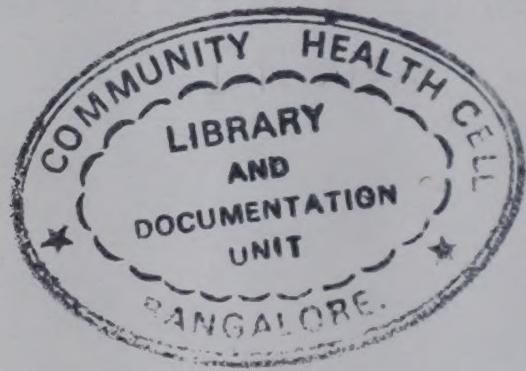


FIRST INTERNATIONAL SEMINAR
ON URANI MEDICINE

FEBRUARY 13-15, 1987, NEW DELHI, INDIA

DR-423

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CURRENT STATUS OF UNANI SYSTEM OF MEDICINE IN AFGHANISTAN

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Voluntary Health Association of India (VHAI) started with the objective of taking health care outside the hospital walls and for building awareness about the linkages between social justice and health services.

The Voluntary Health Association of India (VHAI) is a secular, non-profit, charitable society formed by the federation of 16 State Voluntary Health Associations, linking over 4000 Health Institutions, Projects and Community Health Programmes throughout the country in a Health Movement. It is registered under the Societies Registration Act 1860.

"VHAI assists in making community health a reality for all the people of India, with priority for the less privileged millions with their involvement and participation through the Voluntary Health Sector."

INTRODUCTION AND HISTORICAL BACKGROUND:

Afghanistan is a mountainous country situated in the heart of Asia with an area of 250000 square miles and extreme variation in climate. The great variation in its climate, provides the country to embrace almost all types of medicinal and aromatic plants.

The Folkloric or Traditional System of Medicine (Unani Medicine) in Afghanistan, originates back to times immemorial. In fact, human-beings started to use natural resources, mainly plants, to maintain and to get rid of the diseases, aches, and to save themselves from dangers and enemies since the start of life. Prior to the advent of Unani System of Medicine and that of the Arab Folkloric Medicine, there existed traditional system of medicine in todays Afghanistan. Even before the influence of the Afghan Traditional Medicine by the neighbouring and non-neighbouring countries, people of Afghanistan were primitively self dependent with regards to health care. This can be obvious from the actual practices of health care through traditional system of medicine that even today is currently going in certain rural areas in Afghanistan. For example, in Hazarajat, (one of the least privileged areas in Afghanistan) the people are mainly dependent on their own traditional system of medications.

The practice of the Afghanistan Folkloric or Traditional Medicine has been a heritage from the ancestors through stories from tongue to tongue and from father to son, and through some written documents. However, after immigrations to and fro Afghanistan, the traditional system of medicine was also influenced and some more experiences were added to the system. The system was mainly influenced by the Indo-Chinese, Unani and Persian systems of medicine. But, the main and fundamental changes in the Afghan traditional system of medicine have been envisaged after the introduction of Islam in Afghanistan. Islam as the religion in Afghanistan; and the strong Islamic beliefs of the people; the holy Quran being in Arabic, provided the tendency and obvious interest and curiosity for the people towards Arabic language. This is the major cause and the main reason for the Afghan practitioners in various fields of traditional medicine to utilize

Arabic books and descriptions available in various fields of medicine since the earliest stages of Islam in Afghanistan. Several Arabic books and many other documents Arabic books and/or portions of the books and some written documents were brought to Afghanistan and utilized by the practitioners. That is why almost all of the medical terms and expressions used by these practitioners are still in Arabic. In fact, valuable and scientific books and documents were published by the Arabs, some of which became very famous in the east and west. For example, the books Al-Hawi (written by Al Razi, 850-923 A.D.) and Al-Qanoon (Avicenna, 980-1030 A.D.) and Al-Tasrif (written by Abu al Qasim Al-Zahrawy who died in 1013 A.D.), were the text books in the Arabic speaking world as well as in European Universities for several centuries (3 and 4). Al-Hawi was translated to Latin in 1486 in Broacia and published in Venice in 1547. Al-Razi, was the first to describe small-pox and measles in his valuable treatise Al-Husba wa-al-Judari, which is considered as the best heritage of Arab medicine. It was the first clinical account of small pox which he gave and differentiated it from measles. Al-Qanoon of Ave Sina, according to Osler, was a (medical bible) for a longer period than any other book, (3).

TRADITIONAL HEALERS:

A traditional healer is usually a respectful and beloved person who is easily available to his/her community. In general, there are two categories of traditional practitioners: 1) those who have qualifications and diplomas from a recognised institution mainly from India and Pakistan. 2) those who are unqualified academically, but have enough traditional experiences from the ancestors (i.e. father, grand-

father or Khalifas, which means teacher).

The traditional healers or the traditional practitioners in Afghanistan are designated by various names. The following designations are the most popular names for traditional practitioners:

1. The Hakeem; the word Hakeem is derived from the Arabic word (Hekma), which means wisdom and knowledge and specially is referred to those who have Unani medical information and cure the patients. A considerable number of people, particularly those living in provinces and villages, have strong belief in traditional system of medicine due mainly to unavailability of health care centres, doctors, pharmacists and nurses, so that some of the Hakeems and Attars daily receive hundreds of patients that most of them are completely cured. While some may suffer even worse.
2. The Attar; the word Attar, also has been derived from an Arabic word (Atr), which means perfume and is used for those who extract the essential oils from medicinal and aromatic plants. However, in general sense, an Attar is the one who usually prepares perfumerics as well as herbal Unani medicines.
3. Shekista-band; that is composed of two words. Shekista, meaning fracture or broken and Band meaning to tie with bandage. Simply it means bone-setter. Some of the Shekista-band are highly expert people.
4. Mar-geer; is composed of two words namely, Mar which means snake, and Geer which means to catch. Generally a Mar-Geer is the one who catches poisonous snakes, scorpions, poisonous spiders, bees, etc.

without pre-medications. Mar-geers, are highly respected among traditional practitioners. In fact, they are able to cure serious snake bites by praying and applying certain herbal medicine. By an unknown and extraordinary (un-explainable) manner or mechanism they excrete the venum of the snake, scorpion, etc. from the region of the bite, through praying and some special acts. Wherever and whenever there is a snake bite, the preference and first choice is given to the Mar-geers. Mar-geers also cure certain skin diseases and joint pains.

The Mar-geer is also called as Dam-gar, Dam-gar simply means prayer. The one who has the ability to cure an insect bite including snake bite by praying and/or majic.

Daya or Dayi; A Dayi (mid-wife) is a lady with enough experience for child delivery and mother and child care during pregnancy, delivery and lactation. A Dayi will be visiting the mother and the child for three consecutive days after delivery and advises for special diet, to increase the milk secretion. Likewise, the Daya gives instructions to pour seeds of (espand) and pieces of (Burboo) on a coal fire 2-3 times daily in the patients room to induce some smoke aiming to kill the germs. Also the Dayi advises the delivering lady to use helba tea (*Trigonella Foenem-graecum L.*) and to add helba seeds in the food. So it is believed that helba will facilitate milk flow in the breast nivole and helps in the relief of uterine and abdominal pains. In fact, a Dayi has enough experience in advising specific diets or regulating the quality and quantity of food to treat certain delivery ailments of the mother and some disorders of the child.

6. The Salmani or Dalak; is mainly involved in circumcision and some of them use the massage techniques to relieve pain or muscle stretch.
7. The Mullah; is a religious person who is trying to give healing through prayers, charms and some acts to avert evil. Mentally ill patients (particularly Grandmal epileptics) and psychic people are their main patients. It should be noted that a(Mullah) is different from those of the (Dam-gar)

TECHNICS FOR DIAGNOSIS:

In the process of diagnosis the following are carefully checked within the patients by the practitioners.

The physical status and temperament of the patient will be considered the most important in diagnosing a disease. They observe and examine the eyes for corneal colour change, lacrimation, dullness or brightness. Examination of the nasal secretions, tongue, ears, skin colour, are other diagnostic parameters. Urine and stool physical characteristics are indicative for health or disease states. Pulse is carefully examined whether it is fast or slow and whether it is strong or weak. Besides, the patients full annamness and the history of his illness is taken and particular attention is made in urine and stool passage, and sleep and emotional characteristics of the patient.

Then, according to diagnosis achieved, certain drugs (mostly mixtures in the form of pillules) will be given to the patient against small charge.

A brief description of the patient's status will be recorded and kept in the informal diary book that may be needed during the next visits.

DISEASES CLAIMED TO BE CURED:

Traditional system of medicine is successful to cure several diseases and ailments. The following have been treated:

1. Allergic and non allergic acute and chronic skin diseases including leukoderma and exema.
2. Certain eye diseases
3. Peptic ulcers and gastrointestinal disorders
4. Hypertension
5. Rhumatic diseases
6. Bronchial asthma
7. Worm infestation
8. Diabetes mellitus
9. Haemorrhoid
10. Congestive heart failure
11. Snake and insect bites and stings
12. Leishmaniosis
13. Leprosy

LEGISLATION (Legal Aspects of Traditional Medicine)

There are no Unani or Traditional medical colleges for the education and training of practitioners. Therefore, so far, no official laws and/or rules or regulations have been devised regarding the practice of traditional medicine in Afghanistan. However, the practitioners in this field, should be registered at the Ministry of Public Health. Since a decade, it has been decided that the educated traditional practitioners, must have got a bonafide diploma from a recognized institute or college of Unani medicine from abroad.

In the early seventies, (before political changes of 1978 in Afghanistan), the Ministry of Public Health in collaboration with Kabul University (faculty of pharmacy,) planned a thorough study of traditional medicine in an attempt to establish a NEW INSTITUTE OF UNANI AND ACUPUNCTURE MEDICINE and to regulate and legislate it officially. But

it was not achieved due to political changes and disturbances in the country.

ROLE OF TRADITIONAL MEDICINE IN HEALTH CARE:

The practice of traditional medicine in Afghanistan and the system of drug utilization through this system is of great importance. Under present conditions, the traditional system of medicine in Afghanistan plays a major role in the community health care particularly in that of primary health care. This is because:

1. Many people, particularly those living in rural areas are accustomed to traditional system of medicine and have strong beliefs in the system.
2. No evidences of mortality, toxicity or serious side effects have been reported using Unani medicines.
3. Unani medicines are easily and readily obtained with the lowest costs at peoples localities.
4. People cannot easily and safely go to the health care centres (if there is any) due to nonavailability of transport facilities.
5. As no one system i.e. (allopathic or traditional systems) could completely and entirely serve all the people .
6. The traditional system of medicine is complementary and supplementary to modern medicine. The incorporation of both systems will play an important role in health care of the community and eradication of the ailments.
7. At the time being, the government is unable to furnish health services to the rural areas. Not only that, even in some major cities, governmental health services are very poor and insufficient.

RESEARCH

The Unani or Traditional system of Medicine in Afghanistan as yet is untouched with regards to scientific research. The traditional medicine, makes extensive use of a vast number of medicinal and aromatic plants as well as some other natural agents. Medicinal plants are mainly used as compounded drugs and rarely as single ingredient drugs. Since the majority of their remedies are obtained from plants, at the out-set it is necessary to evaluate the Afghan medicinal and aromatic plants as well as the drug formulations and many other aspects of the socio-culture of the Afghan Traditional Medicine.

Since recently, in an attempt to confirm and/or to refute the traditional beliefs on the medicinal plants, we started PHARMACOGNOSTICAL, PHYTOCHEMICAL and PHARMACODYNAMICAL studies of the most commonly used Afghan medicinal and aromatic plants. For example *Achillia santolina*, is widely used in dropsy and as an anthelminthic in traditional medicine. When studied scientifically, the plant was shown to induce significant cardiotonic action, while ineffective with regards to helminthiasis (12). Tea of the flowering tips of the plant *Heliotropium ellipticum* Ledeb, is vastly used as analgesic and antispasmodic in traditional medicine. Scientific studies are in full agreement with such beliefs(10).

The results of pharmacological and pharmacognostical studies of some of the most commonly used medicinal and aromatic plants by the traditional healers, are shown in Tables I and II. However, for the preservation of the cultural heritage, it is absolutely necessary to carry out a thorough study and research on various aspects of the Afghan Traditional Medicine.

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Table (1): PHARMACOLOGICAL STUDIES OF SOME AYURWAN MEDICINAL
PLANTS WIDELY USED IN UGANDA MEDICINE.

Ser. No.	Name of the Plant (Local names in the brackets)	Part Used	Active Ingre- dient	Active Ingredient	Pharmacological Effects observed in Experimental Animals*	Ref. No.
1.	<i>Morus serrata</i> Robis (Toot-e-Khasak)	Flowers	Alcoholic Extract	10% total 0.2% bitter principles	Significant hypoglycemic effect in alloxan treated rats.	2
2.	<i>Cichorium intybus</i> L. (Bekh-e-Kasni)	Roots	Alcoholic Extracts and bitter principles	10% total 0.2% bitter principles	Significant choleric effect in rabbits	25
3.	<i>Achillea Santolina</i> L. (Boy madaran)	Flower & Leaves	Alcoholic Extract	5.9% total	Significant cardiotonic effect in O-Pigs in comparison to digitalis tincture	11
4.	<i>Achillea Santolina</i> L. (Boy madaran)	Flower & Leaf	Alcoholic Extract	5.5% total	Neither antihelminthic, nor antibacterial effects were seen	12
5.	<i>Cichorium intybus</i> L. (Bekh-e-Zasni)	Roots	Alcoholic Extract	10% total 0.2% bitter principle	Antipyretic effect on exper- imental fever equivalent to amidopyrine.	13
6.	<i>Cichorium intybus</i> (Bekh-e-Kasni)	Roots	"	"	Bitter principles and the alcoholic extract induced significant analgesic effect and reduced motor activity in rats.	14
7.	<i>Withania coagulans</i> (Kakna)	Leaf (entire plant)	Extract (Atropine, Reserpine & scopolamine)	Three alkaloids determined $LD_{50} = 11.6\text{mg/Kg. BW in mice}$	17	
8.	<i>Rhamnus Stricta</i>		Extract (Btryctamine, Sesamin, Tet- rahydrosoecamine, vallescoisotamine secoamine & stricla- mine)	Six alkaloids determined $LD_{50} = 25 \text{ mg/kg BW in mice}$	17	

Table (1) Continued

2.	<i>Artemesia scoparia</i> (Tork)	Leaf	Essential oil (scoparone, thymol, eugenol, pneillidene & Sisodine Santo- nica)	135	ED ₅₀ = 970 mg/kg DW in rats	17
10.	<i>Athyrea fraginalis</i> Molozai-Yatatic Papaver rhoeas (Aijoon)	Flowers	Flowers	Possessable to significant expectorant effect was seen in experimental animals	15	
11.	<i>Viola cornuta</i> (Gul- e-benala)	Flowers	Flowers			
	<i>Verbascus thapsus</i>	Flowers	Flowers			
	<i>Ariagrigorio</i>	Flowers	Flowers			
12.	<i>Solanum nigrum</i> Solanum laciniatum (ang angootra)	Leaf	Solasodine, Jola- margine, solaradizidine & pregnenolone	Glaibedine & solardizidine induced significant antigenic effect	6	
13.	<i>Solanum nigrum</i> Solanum laciniatum (ang angootra)	Leaf	Solasodine Solaradizidine Solamarginine Pregnenolone	Solabondine called 70 induce castroide-like activity	6	
14.	<i>Solanum nigrum</i> (ang angootra)	Leaf	Solasodine Solaradizidine Solamarginine Pregnenolone	Only solabondine induced anabolic activity in rats	6	
15.	<i>Solanum nigrum</i> S. laciniatum (ang angootra)	Leaf	Solasodine Solaradizidine Solamarginine Pregnenolone	Solamarginine showed signifi- cant progestrone- like activity in rats.	6	
16.	<i>Heliotropium ellipticum</i> ledeb (linhium or Gajdhus- buta)	Flowers tips	Extract	Solabondine, solardizidine & solamarginine exerted corti- -costeroid-like activity in rats.	5	
				Significant long lasting anapheric action was seen in rats	10	

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Table (2): PHARMACOLOGICAL STUDIES OF SOME AFGHAN MEDICINAL PLANTS
COMMONLY USED IN URDU MEDICINE

Ser. No.	Name of the Plant (Local names in the brackets)	Parts used	Active Ingredient	Active Ingredient	Remarks	Ref. No.
1.	<i>Thuya orientalis</i>	Dry & fresh Fruits	Essential Oil	4%	3-4 times that of European plants i.e. <i>Thya occidentalis</i>	23
2.	<i>Cupressus sempervirens</i> L.	Fruits	Essential oil (cypresene, thujone, santalone, santalol, thujol, alpha terpineol, alpha terpineone, beta pinene & beta pinane)	25		24
3.	<i>Berberis integrifolia</i> Bunge (Zeriba)	Rhizomes Root	Oxanthine, berberine and berbamine and tetrahydroberberine		Four alkaloids were isolated from <i>B. integrifolia</i> Bunge	1
4.	<i>Oligoflora glabra</i> (Shereen-boja)	Roots	Extract (water) Glycerin 21%	32%		22
5.	<i>Eucalyptus globulus</i> (Uokaijpus)	Leaves	Dry extract Oil Tannin	16% 3.0% 15.2%		20
6.	<i>Ephedra procera</i> Fisch (Koze, Zoma)	Twigs & Green stem	Total alkaloids	1-1.7%	Ephedrine (about 80%)	28

7.	<i>Sphedra intermedia</i> Scarene	Twigs & Stem	Total alkaloids (ephedrine, norephedrine, pseudoephedrine and methyl-eop- bedrine)	0.5-1%	Ephedrine 80%
8.	<i>Anethum graveolens</i> L. (Shibbet)	Entire plant (without root)	Essential oil (puleandrine and Lianone)	5.0%	19
9.	<i>Carus Carvis L.</i> (Zeern)	Seeds	Essential Oil	6-7%	High yielding plant
10.	<i>Carum copticum</i> South et Hook (Jawari)	Seeds	Essential Oil (triganol)	10%	The highest yielding plant 15 comparison to other countries
11.	<i>Petroselinum vulgare</i> M. et (Erupe)	Seeds	Essential oil (Zellandren and Phenone)	7%	Higher yield 12 comparison to the same plant in India, Egypt, England, etc.
12.	<i>Zizaniopsis miliacea</i> (Jabonee)	Seeds	Essential oil	1%	Linalool and pinene were determined.
13.	<i>Nerium odoratum</i> Jolander	Leaves	Alcoholic Extract	9.7%	Severe cariototoxicity and diuretic effect was observed
14.	Pomegranate (Anar)	Bark of fruit Flowers	Tannin	24-25%	Used in Unani medicine as astringent and tooth infections.
15.	<i>Vitis vinifera L.</i> (Ankoor) Rusenini - Rhand- ahari Munuka - Gholaan	Seeds	Tannins	7.8% - 8.5% 9.92% and 9.77% respectively	27

ACKNOWLEDGEMENT

I should express my gratitude and sincere thanks to Mr. Hakim M.A. Razzak, Director, Central Council for Research in Unani Medicine (Ministry of Health and Family Welfare, Government of India), for inviting me to present a paper on Unani Medicine in Afghanistan.

I am very grateful indeed to the Voluntary Health Association of India (VHAI), New Delhi, for providing me all facilities to prepare this paper and the other requirements to attend the First International Seminar on Unani Medicine in India.

My cordial thanks and indeptedness also to Mr. Alok Mukhopadhyay, Executive Director, VHAI and Dr. Mira Shiva, Head of People's Education for Health Action (PEHA) Division and Coordinator, All India Drug Action Network, for their generous encouragements.

I also thank Hakim Sayed Mohd. Shah Gharibzadah (Shah Sahib Afghani) for some information he gave.

Dr. Ali Ahmad Mardanzai

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